

NAVY MEDICINE LIVE

THE OFFICIAL BLOG OF U.S. NAVY AND MARINE CORPS HEALTH CARE • 2011 & 2012 WINNER OF BEST NAVY BLOG

[Home](#) | [About](#) | [Disclaimer](#) | [Navy Medicine News](#) | [Navy Medicine WebSite](#)

Written on DECEMBER 3, 2013 AT 2:36 PM by VKREMER

The Taming of the Elephant Shrew: A Look Back at Navy Medicine’s 1948 Expedition from Cairo to Cape Town

Filed under NAVY HISTORY PUBLIC HEALTH RESEARCH AND DEVELOPMENT (NO COMMENTS)

By Andre Sobocinski, historian, U.S. Navy Bureau of Medicine and Surgery



“He was the most agile talker to whom I ever had listened,” Admiral Lamont Pugh would later recall of his meeting 26-year old explorer-to-be named Wendell Phillips in August 1947.1 A former Superintendent of the Navy Medical School, Pugh was serving as the Deputy Chief of Bureau of Medicine and Surgery (BUMED) in 1947, when Phillips approached him with hopes of eliciting medical supplies and a single Navy medical officer to support University of California at Berkeley’s upcoming anthropological and geologic expedition through Africa.2

For Pugh, Wendell’s ambitious plan of exploration from “Cairo to Capetown” offered Navy Medicine a veritable “lost world” of opportunity to investigate indigenous diseases and collect teaching specimens. By meeting’s end, Pugh awarded Phillips a \$58,000 research contract and promised him a fully-equipped mobile research unit.3

Five months later, the newly formed “Navy unit” headed by tropical medical specialist Cmdr. (later Capt.) Julius Amberson, MC, USN,4 sailed from New York to join the UC Berkeley contingent in Cairo. Amberson’s team was comprised of a host of eminent military and civilian parasitologists, zoologists, as well as a preventive medical technician and a medical photographer.5 The unit was furnished with its own trucks, jeeps, radio and photographic equipment, guns and ammunition, an X-ray machine, and the latest in laboratory equipment.6

When the unit arrived in Port Said on Feb. 3, 1948, the African Continent was still an untapped resource of medical

Navy Medicine Video

Navy Medicine is a global healthcare network of 63,000 Navy medical personnel around the world who provide high quality health care to more than one million eligible beneficiaries. Navy Medicine personnel deploy with Sailors and Marines worldwide, providing critical mission support aboard ship, in the air, under the sea and on the battlefield.

Navy Medicine Social Media

[twitter](#) Follow us on Twitter

[facebook](#) Join us on Facebook

[issuu](#) Read our publications

[flickr](#) View our photo stream

[YouTube](#) Watch our videos

Navy Medicine Live Archives

[January 2015 \(6\)](#)

[December 2014 \(17\)](#)

[November 2014 \(11\)](#)

[October 2014 \(15\)](#)



Breakfast on the Libyan Desert , South of Aswan, Egypt (2/25/48). (Photo courtesy of John Amberson)

knowledge. Until the allied landings in North Africa in November 1942, the Navy Medicine's tropical disease research was centered on the jungles of the Pacific and focused on [schistosomiasis](#), [lymphatic filariasis](#) (AKA. [elephantiasis](#)) and [malaria](#) studies.⁷ The establishment of the [American Typhus Commission](#) in Cairo, Egypt, in 1942, gave U.S. Navy another avenue to investigate the predisposition of diseases in tropical

and semitropical environments.⁸ The famed [Navy Medical Research Unit # 3 \(NAMRU-3\)](#) grew out of the [Typhus Commission](#) in 1946 and began sponsoring the first (albeit limited) Navy medical expeditions of Northern and East Africa soon after.⁹

The joint UC Berkeley-Navy Medicine expedition commenced in Port Said, Egypt, Feb. 17, 1948 and travelled via a caravan of jeeps and trucks through Upper Egypt and Nubia (Cairo to Khartoum) and down the Sudan Road (Khartoum to Nairobi). From April to August, the Navy Unit expedition teams established a base of operations in Nairobi from where group members travelled throughout Kenya, Uganda, Sudan and the eastern Belgian Congo.^{10,11}

Cmdr. Amberson and his team photographed and studied habits of tsetse flies (large blood sucking flies known to transmit “Sleeping

Sickness”), and collected planorbis snails (a vector of schistosomiasis). The Navy Unit assisted local doctors with laparotomies on natives suffering from [Echinococcus granulosus](#) (aka, “[Hyper Tape Worm](#)”).

They collected blood samples from patients suffering from debilitating diseases [trypanosomiasis](#) (African sleeping sickness), [amoebic dysentery](#), [blood filaria](#), [dengue fever](#), [hookworm](#), [leprosy](#), [malaria](#), [podoconiosis](#) (aka, “[mossy foot](#)”), [relapsing-fever](#), [schistosomiasis](#), and [yellow fever](#) and sent specimens to the Naval Medical School and [Naval Medical Research Institute \(NMRI\)](#) in Bethesda, Md. for study.

Along the way, the team travelled through villages collecting medical intelligence, providing smallpox vaccinations, assisting in mosquito control efforts, administering chloroquine to malarial cases, donating medical supplies, and treating everything from fractures and hernias to obstetrical cases and pneumonia.¹²

In Eastern Equatoria (South Sudan), the Navy Unit had gone in search of and found the elusive “[Elephant Shrew](#)” (named for its mobile elephantine proboscis). When these chipmunk-like creatures were first found in 1923, they were discovered to harbor a strain of malaria-type parasite similar to human malaria. Navy scientists thought the shrew was a



Chief Hospital Corpsman Deaner Lawless and Dr. Hoogstraal holding chameleons, Tambora, Tanganyika (9/20/48). (Photo courtesy of John Amberson)

September 2014 (20)
August 2014 (14)
July 2014 (13)
June 2014 (8)
May 2014 (11)
April 2014 (9)
March 2014 (14)
February 2014 (7)
January 2014 (7)
December 2013 (7)
November 2013 (12)
October 2013 (7)
September 2013 (14)
August 2013 (13)
July 2013 (11)
June 2013 (22)
May 2013 (15)
April 2013 (14)
March 2013 (14)
February 2013 (14)
January 2013 (12)
December 2012 (11)
November 2012 (11)
October 2012 (7)
September 2012 (9)
August 2012 (12)
July 2012 (13)
June 2012 (17)
May 2012 (22)
April 2012 (14)
March 2012 (13)
February 2012 (14)
January 2012 (13)
December 2011 (13)
November 2011 (20)
October 2011 (22)
September 2011 (12)

missing link to a treatment for the dreaded disease and would serve as an ideal test-subject for anti-malarial drugs.



Dr. Harry Hoogstraal, Entomologist with Navy Medical Group, holding the ever elusive elephant shrew, Kopeta, Sudan (4/17/48). (Photo courtesy of John Amberson)

With the help of local children, the Navy Unit collected some 250 Elephant Shrews in Eastern Equatoria and sent them to NMRI. NMRI scientists later determined that the Shrew's malaria parasite had a peculiar cyclic course that ultimately had little value for treatment of human malaria; however, it did shed light on the "taxonomic and evolutionary" status of malaria parasites.¹³

In late August, the Navy Unit continued down the Great North Road (through Tanganyika, Northern Rhodesia, Southern Rhodesia, and Transvaal)

and arrived in Capetown on Oct. 19, 1948,¹⁴ covering some 19,660 miles in the process.

While the humanitarian aspect of their mission could be called a model of health diplomacy, the research of the Navy's "safari scientists" was unparalleled in casting light on the medical mysteries of the African Continent. Throughout their nine-month trek from Cairo to Capetown, the Navy Medical Unit collected many thousands of rare specimens, and documented tropical diseases through photographs and film. Much of this material would later be shared with teaching and scientific institutions throughout the world for the benefit of medical education and [global health](#) research.

Footnotes.

1. Pugh, H. Lamont. Navy Surgeon. Philadelphia, PA: J.B. Lippincott Co. 1959. p 308. RADM Herbert Lamont Pugh (1895-1984) would later serve as Surgeon General of the U.S. Navy from 1951 to 1955. The President of UC Berkeley (Robert Gordon Sproul) originally directed Phillips to call upon [Fleet Admiral Chester Nimitz](#), Chief of Naval Operations, for assistance in outfitting the expedition. Since the expedition required medical supplies and medical care, Nimitz directed Phillips to Pugh. Admiral Nimitz's close association with UC Berkeley extended back to the 1920s when he established a Navy ROTC program at the university. Since 1983, Admiral Nimitz has been the namesake of a lecture series at UC Berkeley.
2. Wendell Phillips (1922-1976) was a former UC Berkeley paleontology student with an incredible power of persuasion. While organizing the expedition, Phillips convinced General James Doolittle (then Vice President of Shell Oil Company), to donate 50,000 gallons of oil, General Motors to donate ten Chevy Sedans, and Colt Patent Firearms to donate new guns. He also enticed Charles Camp (1893-1975) and Louis Leakey (1903-1972) to join the expedition. Phillips later set forth on an expedition through Saudi Arabia ostensibly looking for the home city of the "Queen of Sheba" (recounted in his book, *Qataban and Sheba: Exploring the Ancient Kingdoms on the Biblical Spice Routes of Arabia*. Harcourt, Brace and Company, New York, NY. 1955). At the time of his death he was the largest individual holder of oil concessions in the world. (Biblical Archeological Society. <http://members.bib-arch.org/publication.asp?PubID=BSBA&Volume=2&Issue=1&ArticleID=5>)
3. Fisher, Dan. Expedition to Africa, 1949. 3 May 1991. (Unpublished). BUMED Library and Archives.

August 2011 (16)

July 2011 (10)

4. *Navy Medicine can boast of many heroes in the cause of global health, but CAPT Julius Amberson, MC, USN (1895-1988) deserves special mention. In the 1940s, he traveled across Africa, the Middle East and India searching for causes of epidemics and their prevention. He was the first individual to discover that Penicillin was effective against louse-borne Relapsing Fever in Egypt (1944) and later helped develop mobile chemo-therapeutic technique for the cure of cholera in India (1945). From 1966 to 1970, he served as Global Health Instructor at the Navy Medical School (1966-1970) and a technical advisor for a series of Navy produced global medicine training films.*
5. *Other members of the Navy Medical Unit included Cmdr. Rodman Wilson, MC, USNR, Cmdr. Trenton Ruebush, MC, USN, Chief Hospital Corpsman Deaner K. Lawless (Preventive Medical Technician), Dr. Ernst Schwarz (zoologist), Dr. Harry Hoogstraal (entomologist), and AF2 Harley Cope (Medical Photographer).*
6. *BUMED. The History of the Medical Department of the United States Navy, 1945-1955 (NAVMED P-5057). Washington, DC: Government Printing Office. 1957. Pp77-78.*
7. *Fisher.*
8. *NAMRU-3: Men of Science Serving Humanity, 1966. p2.*
9. *Fisher.*
10. *Capt Julius Amberson Memoir, Typed in 1978 (unpublished). BUMED Library and Archives.*
11. *The Navy Medicine Unit severed their ties with Wendell Phillips on July 7, 1948 after a long standing disagreement. On June 3, 1948 Amberson wrote to Admiral Pugh stating that “the Navy group has encountered innumerable difficulties with the California leader which impede its activities. These difficulties are due to incompetence and poor cooperation on the part of leader Phillips and his administrative associates, and to continual nefarious practices which not only dissatisfy the personnel associated with the California agents, but make such a bad impression on local scientists and officials that it is embarrassing for us to be associated as we are.”*
12. *Amberson.*
13. *The History of the Medical Department. pp77-79.*
14. *In October 1948 the Unit detached from Africa and reported aboard USS Huntington. They continued mission of collecting specimens and studying tropical diseases in South America before returning to stateside in December 1948.*

← Next post

Previous post →

vkremer tagged this post with: [1948](#), [African expedition](#), [BUMED](#), [elephant shrew](#), [malaria](#), [Navy](#), [Navy Bureau of Medicine and Surgery](#), [Navy Medicine](#), [research and development](#), [University of California at Berkeley](#)

Read 221 articles by

[vkremer](#)